

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
Re: Appeal to the Board of Patent Appeals and Interferences

Appellant(s): Clark, et al.	)	Examiner: Jennifer Steele
)	
Serial No.: 10/027,791	)	Art Unit: 1771
)	
Filed: December 20, 2001	)	Our Customer ID: 22827
)	
Confirmation No.: 9606	)	Our Account No. 04-1403
)	
Title: "Antimicrobial Pre-moistened Wipers")		

1. ☐ **NOTICE OF APPEAL**: Pursuant to 37 CFR 41.31, Applicant hereby appeals to the Board of Appeals from the decision dated _____ of the Examiner twice/finally rejecting claims _____.
2. ☒ **BRIEF** on appeal in this application pursuant to 37 CFR 41.37 is transmitted herewith (1 copy).
3. ☐ An **ORAL HEARING** is respectfully requested under 37 CFR 41.47 (due within two months after Examiner's Answer).
4. ☐ Reply Brief under 37 CFR 41.41(b) is transmitted herewith (1 copy).
5. ☐ "Small entity" verified statement filed: [] herewith [] previously.

6. **FEE CALCULATION:**

	Fees
If box 1 above is X'd enter \$ 510.00	\$ <u> .00</u>
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PETITION is hereby made to extend the original due date of September 6, 2007, hereby made for an extension to cover the date this response is filed for which the requisite fee is enclosed (1 month \$120; 2 months \$460; 3 months \$1,050; 4 months \$1,640, 5 months \$2,230

	\$ <u> 460.00</u>
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SUBTOTAL:	\$ <u> 970.00</u>
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<u>Less</u> any previous extension fee <u>paid</u> since above original due date.	-	\$ <u> 0.00</u>
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SUBTOTAL:	\$ <u> 970.00</u>
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If "small entity" verified statement filed <input type="checkbox"/> previously,		
<input type="checkbox"/> herewith, enter one-half (½) of subtotal and <u>subtract</u>	-	\$ <u> .00</u>

TOTAL FEE ENCLOSED:	\$ <u> 970.00</u>
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- ☐ Fee enclosed.
- ☐ Charge fee to our Deposit Account/Order Nos. in the heading hereof (for which purpose one additional copy of this sheet is attached)
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- ☐ Fee NOT required since paid in prior appeal in which the Board of Appeals did not render a decision on the merits.

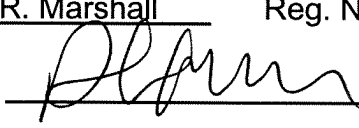
The Commissioner is hereby authorized to charge any fee specifically authorized hereafter, or any fees in addition to the fee(s) filed, or asserted to be filed, or which should have been filed herewith or concerning any paper filed hereafter, and which may be required under Rules 16-18 (deficiency only) now or hereafter relative to this application and the resulting official document under Rule 20, or credit any overpayment, to our Account No. shown in the heading hereof. This statement does not authorize charge of the issue fee in this case.

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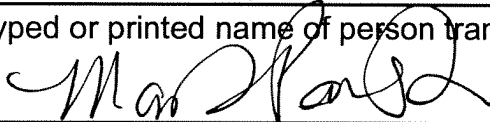
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Date: October 9, 2007

I hereby certify that this correspondence and all attachments and any fee(s) are being electronically transmitted via the internet to the U.S. Patent and Trademark Office using the Electronic Patent Filing System on October 9, 2007.

Maria T. Parrish

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PATENT
ATTORNEY DOCKET NO.: KCX-391(16284)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	Clark, et al.	)	Examiner:	Jennifer Steele
)		
Appl. No:	10/027,791	)	Art Unit/T.C:	1771
)		
Filed:	December 20, 2001	)	Deposit Acct. No:	04-1403
)		
Title:	Antimicrobial Pre-Moistened	)	Confirmation No:	9606
	Wipers)		
		)	Customer ID No:	22827

Mailstop Appeal Brief - Patents
Honorable Commissioner for Patents
U.S. Patent and Trademark Office
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Alexandria, VA 22313-1450

BRIEF ON APPEAL

Honorable Commissioner:

Appellants submit the following brief on appeal in accordance with 37 C.F.R. § 41.37:

1. REAL PARTY IN INTEREST

The real party in interest in this matter is the assignee of record, Kimberly Clark Worldwide, Inc.

2. RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences known to the Appellants or the Appellants' legal representative which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

3. STATUS OF CLAIMS

Currently, claims 27-38, 50-51, 53-54, 56-58, 60-71, and 73-81 remain pending in the present application, including independent claims 27 and 35.

Previously, claims 1-26, 39-49, 52, 55, 59, and 72 were canceled from the present application.

The rejection of all of the pending claims 27-38, 50-51, 53-54, 56-58, 60-71, and 73-81 is hereby appealed.

4. STATUS OF AMENDMENTS

To the Appellants' knowledge, all amendments have been entered into the record.

5. SUMMARY OF CLAIMED SUBJECT MATTER

In general, the present invention is directed to a wiper that is effective against gram negative and/or positive bacteria. In particular, the wiper of the present invention is applied with a sanitizing formulation that contains an antimicrobial agent such that, when released from the wiper during use, kills and/or inhibits the growth of bacteria on a surface. Unexpectedly, it has been discovered that the desired level of antimicrobial effectiveness can even be achieved at relatively small levels of the antimicrobial agent.

Pg. 6, line 25 – pg. 7, line 2.

For example, independent claim 27 is directed to a wiper comprising a nonwoven fabric and a sanitizing formulation applied to the nonwoven fabric in an amount from about 150% to about 600% of the dry weight of the wiper. See, e.g., pg. 1, lines 30-31. The sanitizing formulation includes a surfactant component that consists essentially of one or more nonionic surfactants. See, e.g., pg. 17, line 4 – pg. 22, line 4. Also, the

sanitizing formulation includes between about 0.01% by weight to about 0.4% by weight of at least one benzalkonium halide. See, e.g., pg. 13, line 28 – pg. 14, line 9 and pg. 16, lines 1 – 7. The sanitizing formulation has a pH of greater than about 8. See, e.g., pg. 25, lines 10 – 21. The sanitizing formulation is configured so that the formulation is released from said nonwoven fabric as a solution during use of the wiper in food service applications. See, e.g., pg. 12, line 20 – pg. 13, line 9. The benzalkonium halide is present within the released solution in an amount less than about 2000 parts per million of said released solution. See, e.g., g. 12, line 28 - pg. 13, line 3. The wiper exhibits a log reduction for *E. Coli*, *S. Aureus*, or both of at least about 3 and a Kill Efficiency Ratio for *E. Coli*, *S. Aureus*, or both of at least about 40. See, e.g., g. 12, line 28 - pg. 13, line 3 and pg. 3, lines 18 – 27.

Independent claim 35 is generally directed to a wiper comprising a nonwoven fabric and a sanitizing formulation applied to the nonwoven fabric in an amount from about 150% to about 600% of the dry weight of the wiper. See, e.g., pg. 1, lines 30-31. The sanitizing formulation includes a surfactant component that consists essentially of one or more nonionic surfactants. See, e.g., pg. 17, line 4 – pg. 22, line 4. Also, the sanitizing formulation includes between about 0.01% by weight to about 0.4% by weight of at least one benzalkonium halide. , e.g., pg. 13, line 28 – pg. 14, line 9 and pg. 16, lines 1 – 7. The sanitizing formulation has a pH of greater than about 8. See, e.g., pg. 25, lines 10 – 21. The sanitizing formulation is configured so that said formulation is released from said nonwoven fabric as a solution during use of the wiper in food service applications. See, e.g., pg. 12, line 20 – pg. 13, line 9. The benzalkonium halide being present within said released solution in an amount less than about 2000 parts per

million of said released solution. See, e.g., g. 12, line 28 - pg. 13, line 3 and pg. 3, lines 18 – 27.. The wiper exhibits a Kill Efficiency Ratio for *E. Coli*, *S. Aureus*, or both of at least about 100. See, e.g., pg. 29, line 9 – pg. 30, line 13.

6. GROUND S OF REJECTION TO BE REVIEWED ON APPEAL

In the Office Action, claims 27-38, 50-51, 53-54, 56-58, 60-71, and 73-81 were rejected under 35 U.S.C. § 102(e), or in the alternative, §103(a), in view of U.S. Pat. Patent No. 6,716,805 to Sherry, et al.¹

7. ARGUMENT

Appellants respectfully submit that the presently pending claims are patentable over the cited references.

I. Independent claims 27 and 35 are not anticipated by and are non-obvious in view of Sherry, et al.

A claim is anticipated only if each and every element as set forth in the claim is found in a single prior art reference. See *Verdegaal Bros. v. Union Oil Co. of Calif.*, 814 F.2d 628 (Fed. Cir. 1987). Although anticipation under Section 102 is not an *ipsissimis verbis* test (e.g., identity of terminology is not required), the elements must be arranged as required by the claim, and the identical invention must be shown in as complete detail as is contained in the claim. In *re Bond*, 910 F.2d 831 (Fed. Cir. 1990); *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226 (Fed. Cir. 1989).

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. See *In re Fine*, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the

¹ In rebutting this rejection, Applicants do not admit nor acquiesce to Sherry, et al.'s status as prior art under any section of 35 U.S.C. § 102 to the present application.

Examiner must make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966). “[T]he examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a prima facie case of unpatentability.” *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). Furthermore, “there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness’... [H]owever, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 82 USPQ2d 1385, 1396 (2007) (quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)). Accordingly, even if all elements of a claim are disclosed in various prior art references, the claimed invention taken as a whole cannot be said to be obvious without some reason given in the prior art why one of ordinary skill would have been prompted to modify the teachings of the references to arrive at the claimed invention. See e.g., *In re Regel*, 188 U.S.P.Q. 132 (C.C.P.A. 1975).

Sherry, et al. is directed to hard surface cleaning compositions and their use with absorbent pads. Sherry, et al. describes several different types of compositions, specifically (a) “daily shower” compositions (col. 21, line 45 – col. 23, line 29), (b) glass cleaner compositions (col. 23, line 30 – col. 24, line 36), and (c) general purpose and conventional floor cleaning compositions (col. 24, line 37 – col. 225, line 67). Also, Sherry, et al. teaches that the glass cleaner compositions or the general purpose and conventional floor cleaning compositions (of b and c above) can be used in a premoistened wipe. Col. 26, lines 1-6.

The Office Action apparently cites to the section addressing the “Premoistened Wipes for Floors, Counters, and/or Walls” discussed from col. 35, line 56 – col. 39, line 20 in an attempted to reject independent claims 27 and 35. In this embodiment, the cleaning composition includes a hydrophilic polymer and an effective amount of a primary detergent surfactant, along with several optional ingredients described in compositions “b” and “c”. Col. 35, lines 58-60. The hydrophilic polymer is “essential” to the composition in order to improve the hydrophilicity of the surface being treated. Col. 5, lines 45-48. In this premoistened wipe embodiment, an anti-microbial system can be included. The anti-microbial system can include the use of quaternary ammonium salts such as dimethyl benzyl ammonium chlorides. Col. 36, lines 57-61 and col. 37, lines 22-32.

Sherry, et al. further teaches that an “important” benefit of the wet wipes they disclose is that fact that they “allow for residual disinfectancy benefits.” Col. 37, lines 33-39. By residual disinfectancy, Sherry, et al. means that the residual antimicrobial actives delivered by the wet wipe onto the hard surface at least about 99.9% cidal against bacteria and other microorganisms for a period of from about 8 to about 72 hours, more preferably from about 12 to about 48 hours, most preferably at least about 24 hours. Sherry, et al. teaches that the residual properties result from a combination of low vapor pressure and high cidal efficacy of the antimicrobial actives associated with the compositions of the present invention. Col. 37, lines 39-56.

A. Sherry, et al. fails to teach all of the limitations of independent claims 27 and 35.

However, Sherry, et al. fails to teach or suggest several other aspects of the limitations of independent claims 27 and 35, including the Kill Efficiency Ratio and that

the benzalkonium halide is present within a released solution in an amount less than about 2000 parts per million of the released solution, while attaining a high log reduction for *E. coli*, *S. Aureus*, or both. In fact, Sherry, et al. completely fails to recognize that it is beneficial to control and minimize of benzalkonium halide content within that released solution. As explained by the present application, such control of the amount of benzalkonium halide within the released solution is especially important during use of the wiper in food surface applications. Thus, Applicants respectfully submit that Sherry, et al. does not disclose or suggest all of the limitations of independent claims 27 and 35.

Thus, Applicants respectfully assert that claims 27 and 35 are not anticipated by Sherry, et al. Applicants note that a claim is anticipated only if each and every element as set forth in the claim is found in a single prior art reference. See *Verdegaal Bros. v. Union Oil Co. of Calif.*, 814 F.2d 628 (Fed. Cir. 1987).

B. Sherry, et al. teaches away from the wipes claimed in independent claims 27 and 35.

A prima facie case of obviousness can be rebutted if the applicant can show that the art in any material respect taught away from the claimed invention. In *re Haruna*, 249 F.3d 1327,1335 (Fed. Cir. 2001), citing *In re Geisler*, 116 F.3d 1465, 1469 (Fed. Cir. 1997). A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant. In *re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994). Furthermore, a “prior art reference must be considered in its entirety, ie., as a whole, including portions that would lead away from the claimed invention.” M.P.E.P. 8th Ed., Rev. 2, §2141.02, citing *W.L. Gore & Associates v Garlock, Inc.*, 721 F.2d 1540 (Fed. Cir. 1983).

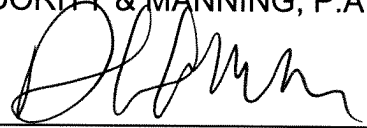
In the present case, Sherry, et al. actually teaches away from the wipers of independent claims 27 and 35. As discussed above, Sherry, et al. specifically teaches that their premoistened wipers having antimicrobial actives provide residual antimicrobial actives delivered by the wet wipe onto the hard surface at least about 99.9% cidal against bacteria and other microorganisms for a period of from about 8 to about 72 hours. Col. 37, lines 30-43. This “residual antimicrobial actives” is the type of result that the wipers of independent claims 27 and 35 are designed to avoid by having the benzalkonium halide present within the released solution in an amount less than about 2000 parts per million of the released solution. Thus, the wipers of claims 27 and 35 may minimize the “residual antimicrobial actives,” which is important when the wipers are used in food service applications. For instance, the present application teaches that solutions released by wipers in the food service environments are often required to contain a relatively small amount of the antimicrobial agent. For example, Title 21, Section 178.1010 of the United States Code of Federal Regulations sets forth various requirements for use of sanitizing solutions used on food-processing equipment, utensils, and other food-contact articles. Pg. 1, lines 15-21.

As such, for at least the reasons set forth above, Applicants respectfully submit that the present claims patentably define over all of the prior art of record. Thus, it is believed that the present application is in complete condition for allowance and favorable action, therefore, is respectfully requested.

Please charge any additional fees required by this Appeal to Deposit Account
No. 04-1403.

Respectfully submitted,

DORITY & MANNING, P.A.

A handwritten signature in black ink, appearing to read 'Alan R. Marshall', is written over a horizontal line.

Alan R. Marshall

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Date: Oct. 9, 2007

8. CLAIMS APPENDIX

1-26. (Cancelled)

27. (Rejected) A wiper comprising a nonwoven fabric and a sanitizing formulation applied to said nonwoven fabric in an amount from about 150% to about 600% of the dry weight of the wiper, said sanitizing formulation comprising a surfactant component that consists essentially of one or more nonionic surfactants, and said sanitizing formulation further comprising between about 0.01% by weight to about 0.4% by weight of at least one benzalkonium halide, wherein said sanitizing formulation has a pH of greater than about 8 and is configured so that said formulation is released from said nonwoven fabric as a solution during use of the wiper in food service applications, said benzalkonium halide being present within said released solution in an amount less than about 2000 parts per million of said released solution, and wherein the wiper exhibits a log reduction for *E. Coli*, *S. Aureus*, or both of at least about 3 and a Kill Efficiency Ratio for *E. Coli*, *S. Aureus*, or both of at least about 40.

28. (Rejected) A wiper as defined in claim 27, wherein said benzalkonium halide comprises between about 0.1% to about 0.4% by weight of said sanitizing formulation.

29. (Rejected) A wiper as defined in claim 27, wherein said sanitizing formulation further comprises a sequestrant in an amount between about 0.01% to about 1.5% by weight of said sanitizing formulation.

30. (Rejected) A wiper as defined in claim 27, wherein said nonionic surfactants are present in an amount between about 0.01% to about 1% by weight of said sanitizing formulation.

31. (Rejected) A wiper as defined in claim 27, wherein said sanitizing formulation further comprises non-aqueous solvent in an amount between about 1% to about 15% by weight of said sanitizing formulation.

32. (Rejected) A wiper as defined in claim 27, wherein the wiper exhibits a log reduction for *E. Coli* of at least about 4.

33. (Rejected) A wiper as defined in claim 27, wherein the wiper exhibits a log reduction for *S. Aureus* of at least about 4.

34. (Rejected) A wiper as defined in claim 27, wherein said benzalkonium halide is present in an amount of between about 150 to about 400 parts per million of said released solution.

35. (Rejected) A wiper comprising a nonwoven fabric and a sanitizing formulation applied to said nonwoven fabric in an amount from about 150% to about 600% of the dry weight of the wiper, said sanitizing formulation comprising a surfactant component that consists essentially of one or more nonionic surfactants, and said sanitizing formulation further comprising between about 0.01% by weight to about 0.4% by weight of at least one benzalkonium halide, wherein said sanitizing formulation has a pH of greater than about 8 and is configured so that said formulation is released from said nonwoven fabric as a solution during use of the wiper in food service applications, said benzalkonium halide being present within said released solution in an amount less than about 2000 parts per million of said released solution, and wherein the wiper exhibits a Kill Efficiency Ratio for *E. Coli*, *S. Aureus*, or both of at least about 100.

36. (Rejected) A wiper as defined in claim 35, further comprising a preservative, a sequestrant, a non-aqueous solvent, or combinations thereof.

37. (Rejected) A wiper as defined in claim 35, wherein the wiper exhibits a Kill Efficiency Ratio for *E. Coli*, *S. Aureus*, or both of at least about 200.

38. (Rejected) A wiper as defined in claim 35, wherein said benzalkonium halide is present in an amount of between about 150 to about 400 parts per million of said released solution.

39-49. (Cancelled)

50. (Rejected) A wiper as defined in claim 27, wherein said benzalkonium halide is present in an amount of less than about 400 parts per million of said released solution.

51. (Rejected) A wiper as defined in claim 35, wherein said benzalkonium halide is present in an amount of less than about 400 parts per million of said released solution.

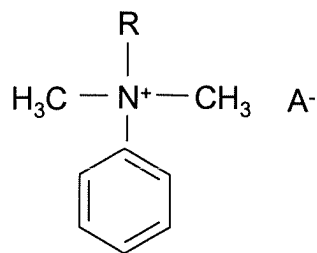
52. (Cancelled)

53. (Rejected) A wiper as defined in claim 27, wherein said nonwoven fabric contains cellulosic fibers.

54. (Rejected) A wiper as defined in claim 35, wherein said nonwoven fabric contains cellulosic fibers.

55. (Cancelled)

56. (Rejected) A wiper as defined in claim 27, wherein said benzalkonium halide has the following formula:



wherein,

R is a C₈-C₁₈ alkyl group; and

A is a halogen atom.

57. (Rejected) A wiper as defined in claim 27, wherein said sanitizing formulation further comprises between about 0.001% to about 30% by weight of non-aqueous solvent.

58. (Rejected) A wiper as defined in claim 27, further comprising between about 0.001% to about 5% by weight of preservative.

59. (Canceled)

60. (Rejected) A wiper as defined in claim 27, wherein the pH of said sanitizing formulation is between about 9 to about 12.

61. (Rejected) A wiper as defined in claim 27, wherein the wiper exhibits a log reduction for *E. Coli* of at least about 3.

62. (Rejected) A wiper as defined in claim 27, wherein the wiper exhibits a log reduction for *E. Coli* of at least about 5.

63. (Rejected) A wiper as defined in claim 27, wherein the wiper exhibits a log reduction for *S. Aureus* of at least about 3.

64. (Rejected) A wiper as defined in claim 27, wherein the wiper exhibits a log reduction for *S. Aureus* of at least about 5.

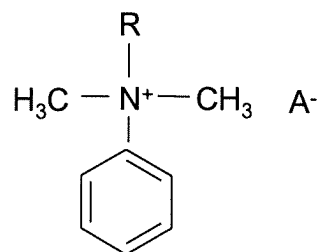
65. (Rejected) A wiper as defined in claim 27, wherein the wiper exhibits a Kill Efficiency Ratio for *E. Coli*, *S. Aureus*, or both of at least about 100.

66. (Rejected) A wiper as defined in claim 27, wherein the wiper exhibits a Kill Efficiency Ratio for *E. Coli*, *S. Aureus*, or both of at least about 200.

67. (Rejected) A wiper as defined in claim 27, wherein the wiper exhibits a Kill Efficiency Ratio for *E. Coli*, *S. Aureus*, or both of at least about 400.

68. (Rejected) A wiper as defined in claim 27, wherein the wiper exhibits an Antimicrobial Reduction of less than about 95%.

69. (Rejected) A wiper as defined in claim 35, wherein said benzalkonium halide has the following formula:



wherein,

R is a C₈-C₁₈ alkyl group; and

A is a halogen atom.

70. (Rejected) A wiper as defined in claim 35, wherein said sanitizing formulation further comprises between about 0.001% to about 30% by weight of non-aqueous solvent.

71. (Rejected) A wiper as defined in claim 35, further comprising between about 0.001% to about 5% by weight of preservative.

72. (Canceled)

73. (Rejected) A wiper as defined in claim 35, wherein the pH of said sanitizing formulation is between about 9 to about 12.

74. (Rejected) A wiper as defined in claim 35, wherein the wiper exhibits a log reduction for *E. Coli* of at least about 3.

75. (Rejected) A wiper as defined in claim 35, wherein the wiper exhibits a log reduction for *E. Coli* of at least about 4.

76. (Rejected) A wiper as defined in claim 35, wherein the wiper exhibits a log reduction for *E. Coli* of at least about 5.

77. (Rejected) A wiper as defined in claim 35, wherein the wiper exhibits a log reduction for *S. Aureus* of at least about 3.

78. (Rejected) A wiper as defined in claim 35, wherein the wiper exhibits a log reduction for *S. Aureus* of at least about 4.

79. (Rejected) A wiper as defined in claim 35, wherein the wiper exhibits a log reduction for *S. Aureus* of at least about 5.

80. (Rejected) A wiper as defined in claim 35, wherein the wiper exhibits a Kill Efficiency Ratio for *E. Coli*, *S. Aureus*, or both of at least about 100.

81. (Rejected) A wiper as defined in claim 35, wherein the wiper exhibits a Kill Efficiency Ratio for *E. Coli*, *S. Aureus*, or both of at least about 400.

9. EVIDENCE APPENDIX

None.

10. RELATED PROCEEDINGS APPENDIX

None.